

Effect of the packaging and storage conditions on the coagulation activity of spray-dried salt-extracted *Moringa oleifera*

ABSTRACT

Moringa oleifera is one of the natural coagulants considered as an alternative to synthetic coagulants. Several studies were carried out on the usage and extraction of this natural coagulant. In this study, the coagulation activity of spray-dried salt-extracted *M. oleifera* seeds powder was investigated under different storage conditions, packaging forms and storage duration. The spray-dried salt-extracted *M. oleifera* seeds powder was stored at room temperature (29°C) and refrigerator temperature (3°C); under different packaging forms; closed container and vacuum packed stored for 6 weeks. Optimization of spray-dried salt-extracted *M. oleifera* shows that the optimal dosage is half of the nonspray-dried salt-extracted *M. oleifera*. The results of residual turbidity of different packaging and storage conditions of salt-extracted *M. oleifera* show that there was no significant difference between them. The coagulation activity decreased insignificantly with the increase of storage duration during the study.

Keyword: *Moringa oleifera*; Natural coagulant; Salt extraction; Storage condition; Spray drying